METHOD FOR MEASURING PHYSICAL PARAMETERS OF AT LEAST ONE MICROSCALE OR NANOSCALE PHASE IN A COMPOSITE SYSTEM

ABSTRACT

The invention relates to a method for determining at least one mechanical parameter of at least one material in a composite system comprising at least two distinct phases, characterized in that it comprises:

a) the production of at least one specimen comprising a first part of a first phase and a second part of a second phase, the second part consisting of the material to be characterized, the specimen having at least one dimension small enough to allow the strains in said specimen to be relaxed;

b) the measurement, on said specimen, of at least one deformation parameter of at least said first phase, in correspondence with a plurality of points lying at different distances from an interface between said first and second phases; and

c) the determination, from at least said deformation parameter, of at least one mechanical parameter of said second phase.

FIGURE 3a